SUPPLEMENTARY CATALOGUE

OF

NEW AND SECOND-HAND

# MICROSCOPES,

MICROSCOPIC OBJECT-GLASSES,

AND

### TELESCOPES,

NOW IN STOCK



NOW IS THE TIME

FOR THOSE WHO NEED MICROSCOPES TO SUPPLY THEMSELVES
FROM OUR EXTENSIVE STOCK.

JAMES W. QUEEN & CO.

(SIGN OF FRANKLIN'S HEAD),

No. 924 Chestnut Street,

### Philadelphia, July 15th, 1879.

The inclosed list of Compound Microscopes represents such instruments as we have in stock, and NOT MENTIONED IN OUR CATALOGUE. These we propose to sell very much below the regular prices in order to curtail our stock, and, at the same time, meet the present finances of many would-be purchasers of Microscopes. Every one of these instruments is warranted to be in perfect order, and as represented in the uccompanying list.

Our stock of Optical, Mathematical and Philosophical instruments is the largest and most varied to be found in the United States, and always contains all novelties and improvements as soon as brought out, either in Europe or this country.

Our Complete Catalogues sent by mail, on application, as follows:

Part 1st, Mathematical Instruments, 160 pages.

Part 2d, Optical " 188 "

Part 3d, Magic Lanterns and Slides, 112 "

Part 4th, Philosophical Instruments, 188 "

#### JAMES W. QUEEN & CO.,

Sign of Franklin's Head,

No. 924 Chestnut Street, Philadelphia.

ESTABLISHED IN 1853.

# MICROSCOPES.

No.	Price.
5000.	Crouch's Student's Microscope, Binocular, same as No. 3105 of our
	Optical Catalogue, 40th edition, but with sliding Sub-stage, with the
	following accessories:
	1 pair Eye-pieces, No. 1.
	1 do. do. No. 2.
	1 Object-glass, 1 inch, 25 degrees.
	1 do. 1 do. 100 do.
	Condenser on stand.
	In upright portable mahogany case. New, \$110 00
5005	Zentmayer's Histological Microscope, Binocular (No. 3125, Optical
0000.	Catalogue, 42d edition), in portable walnut case, with handle and
	Catalogue, 42d ention), in portable waintit case, with nancie and
	lock and key, and the following accessories:
	1 pair Eye-pieces, No. 1.
	1 (only) Eye-piece, No. 3.
	Zentmayer's Glass Stage.
	Rotating Stage-plate.
	Spencer's Professional Object-glass, 1 inch, 30 degrees.
	Do. do. do. ½ do. 65 do.
	Do. do. do. 1 do. 115 do.
	Do. do. 4 do. 15 do.
	(Power ranging from about 50 to 650 diameters.)
	Polariscope.
	Spot-lens.
	Adapter for using Object-glass as Achromatic Condenser.
	Double Nego siege atweight
	Live-box. Stage Micrometer, $\frac{1}{100}$ and $\frac{1}{1000}$ . Turn-table.
	Stage Micrometer 1 and 1
	Turn table
	Turn-table. Section Instrument, for soft tissues, Zentmayer's. Do. Knife, in case.
	The Walter to soft dissues, Zentinayer's.
	Brass Table, for heating slides.
	2 Dissecting Knives.
	Cost \$174.75; good as new; will be sold for
5008.	Zentmayer's Intermediate Microscope, Monocular; with rack and
	pinion, and fine lever adjustments for focus, draw-tube, rotating
	glass stage, sub-stage with rack adjustment, plane and concave mir-
	rors, and the following accessories:
	2 Eye-pieces, Nos. 1 and 2.
	1 Queen's 3-inch object-glass, 30 degrees.
	1 Wales' & do. do. 90 do. adjustable.
	(Power from 75 to 600 diameters.)
	Erector.
	Polariscope.
	Camera Lucida.
	Achromatic Condenser.
	Wenham Parabola.
	In upright walnut case, with side case, and handle and lock and key.
	New price 262.50; will be sold for
	(3)
	(-)



PRICE:

5010. Zentmayer's Grand American Microscope, Monocular: with graduated rotating stage, having rectangular mechanical motions, and the following accessories:

3 Eye-pieces, Nos. 1, 2 and 3.

Zentmayer's best 3 and 5-inch object-glass.

do.  $1\frac{1}{2}$ -inch object-glass, 23 degrees aperture. do.  $\frac{3}{10}$  do. do. do. do.

Do.

Tolles' best 1-inch object-glass, 90 degrees aperture.

10 do. do. 130 do. do. immersion.

(Power ranging from about 10 to 1500 diameters.)

Tolles' prism, for use with the 4-inch object-glass, for opaque illumina-

Jackson Eye-piece Micrometer.

Stage Micrometer,  $\frac{1}{100}$ ,  $\frac{1}{1000}$ ,  $\frac{1}{2000}$ . Polarizing Apparatus, best, with revolving selenite.

Stage Forceps.

Live box.

Camera Lucida.

Bull's-eye Condenser on stand.

In upright walnut case, with side case for accessories. Regular price,

edition, (page 92). With the following accessories:

1 pair No. 1 Eye-pieces. 1 No. 2 Eye-piece.

1 No. 3 do.

Graduated Draw tube.

Large Brass Pliers.

2 Glass Plates with ledge and covers. Key for tightening joint of stand.

No.

PRICE.

Packed in best brass-screwed portable mahogany case. Nearly new. Regular price \$283; will be sold for \$150.00

5014. Beck's Best Student's Microscope, Binocular; with rack and pinion, and fine adjustments for focus; rotating stage with rectangular mechanical motions and sliding stage plate; plane and concave mirrors with all adjustments; with

1 pair No. 1 Eye-pieces. 1 do. 3 do. Graduated Draw tube. 1 pair Brass Pliers.

Glass Plate with ledge and covers.

In best upright mahogany case, with side case for accessories. New, Nos. 5013 and 5014 can be fitted with First-class Objectives of any maker.

See list at the end of this Catalogue; also on pages 93, 94, 95 of our Optical Catalogue, 40th edition.



No.

5015. Beck's Popular Microscope, Monocular; with draw tube, rack and pinion and fine screw adjustments, rotating stage with sliding object-carrier, plane and concave mirrors with complete adjustments; with 2 Eye-pieces, Nos. 1 and 2.

1-inch objective, 22 degrees angular aperture.

½ do. do. 75 do. do. do. adjustable.

(Power ranging from about 60 to 550 diameters.)

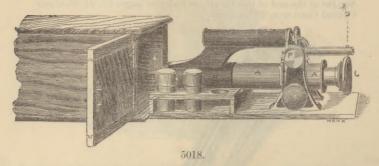
Condenser on stand.

Stage Forceps.

Glass Plate with ledge, covers, etc.

In flat mahogany case, with handle and lock and key. Nearly new.

Regular price \$83; will be sold for . . . . . . . . . . . . \$65 00



5018. Beck's Educational Microscope; a firm stand with joint for varying the inclination; mounted on a mahogany base, which slides into a polished mahogany case, with lock and key, and is very portable; quick and slow motions to the body; stage with spring clips, and supplementary stage, concave mirror with all adjustments; with 2 Eye-pieces, Nos. 1 and 2.

1-inch objective 22 degrees angular aperture.

do. do. 75 do. do. do. adjustable. (Power ranging from 55 to 350 diameters.)

Condenser on stand.

Stage Forceps.

Glass Plate with ledge, etc. New. Regular price \$75; will be sold for

5019½. Beck's Universal Microscope, Monocular; stand with circular base and joint for inclination; very delicate chain motion for focusing; stage with spring clips and diaphragm; concave mirror with all adjustments. The body has revolving disks capable of receiving 3 eyepieces and 3 objectives at the same time; with the following accessories: 3 Eye-pieces, Nos. 1, 2 and 3.

2-inch objective, 9 degrees angular aperture.

1 do. do. 25 do. do. do.

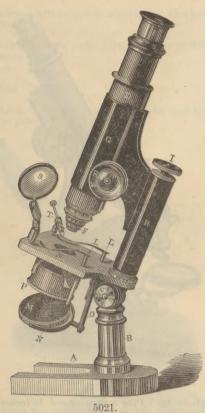
(Power ranging from about 20 to 200 diameters.) Glass Plate with ledge.

In upright mahogany case. Regular price \$50; will be sold for 5021. The Economic Microscope; coarse adjustment by rack and pinion; fine screw adjustment for high powers; draw tube; concave mirror on bar for oblique light; set of diaphragms; 1-inch and \(\frac{1}{4}\)-inch object-glasses, and two eye-pieces, giving powers of from 45 to 330 diameters; side condensing-lens for opaque objects; stage-forceps, pliers, and glass slip with ledge, in mahogany case, with lock and key. New,

40 00

25 00

40 00



No. PRICE. 5023. Queen's Family Microscope; all brass, 15 inches high, with joint for inclination; draw tube; rack and pinion and fine lever adjustments for focus; lever stage, with revolving diaphragm; concave mirror, with adjustments for obliquity; heavy tripod base, with 2 uprights; with 2 Eye-pieces. 2 Sets of Achromatic Object-glasses, giving from 35 to 600 diameters. Polarizing apparatus. Forceps, Knife, Needles, etc. In upright mahogany case, with handle and lock and key. Regular price \$90; will be sold for
5024. Tolles' Student's Microscope; stand 15 inches high, with joint for
inclination; heavy tripod base and arm of iron, neatly japanned;
coarse adjustment by sliding tube; fine adjustment; sliding stage \$40 00 with rectangular motions and stop for Maltwood finder; revolving diaphragm of 4 apertures; concave mirror with adjustment for obliquity; with 2 Eye-pieces. 1 Object-glass, 1-inch focus. do. do. (Power ranging from 40 to 340 diameters.) In upright walnut case with handle and lock and key. Regular price \$88; will be sold for 35 00



5023.

PRICE. 5025. Microscope, made by Benj. Pike & Sons; stand 16 inches high, with tripod iron base, japanned; rack and pinion and fine lever adjustments for focus; lever stage with revolving diaphragm; large plane and concave mirrors with all adjustments; with 3 Eye-pieces. 1 Object-glass, Beck's, 1-inch focus. do. 1 do. (Power ranging from 50 to 300 diameters.) Polariscope. Stage Forceps, pliers, etc. In upright mahogany case, with handle and lock and key, \$40 00 5026. Microscope, made by Benj. Pike's Son; stand 16 inches high, with iron tripod base and arm; coarse adjustment by chain movement; lever fine adjustment; graduated draw-tube; glass stage (modification of Zentmayer's); revolving diaphragm; plane and concave mirrors, on arm swinging to give oblique light; with 2 Eye-pieces, Nos. 1 and 3. 1 Object-glass, 1-inch focus. Polariscope. In upright walnut case, with handle and lock and key, 30 00

5028. Queen's Educational Microscope; all brass, 12 inches high, with joint for inclination; rack-and-pinion, and fine lever adjustments for focus; circular glass stage with rotating diaphragm; sub-stage tube for carrying polarizing prism or other accessory apparatus; plane

No.

PRICE.

and concave mirrors with complete adjustments, whether for central or oblique light; with

2 Eve-pieces.

2 Object-glasses (1 inch and \(\frac{1}{4}\) inch), giving from 40 to 200 diameters. Condensing Lens on stand.

Animalculæ Cage.

Stage Forceps.

Knife and Needles.

Brass Pliers, etc.

In upright portable mahogany case, with handle and lock and key. New. Regular price \$50; will be sold for . . . . .



5029.

5029. Queen's Educational Microscope; same as No. 5028, but with the addition of a mechanical stage, having rectangular motions of about of an inch in each direction. New. Regular price \$50; will be sold for

5029½.Queen's Educational Microscope; same as No. 5029, but with no condensing lens or stage forceps. Second-hand,
5030. Queen's Educational Microscope; same as No. 5028, but with horseshoe base and double pillars; condenser attached to body of microscope, with universal motions. New,
A Polarizing Apparatus, with selenite plate, can be added to either Nos. 5028, 5029, or 5030, for

30 00

35 00

20 00

8 00

5031. Queen's Educational Microscope; stand similar to No. 5027, but with no diaphragm; concave mirror only, with no adjustment for obliquity; with

No.

1 Eye-piece.
1 set of Achromatic object-glasses, giving from 75 to 220 diameters.
Animalculæ Cage.
Brass Pliers.
In upright portable mahogany case. New, . . . . . . . . \$15 00



5035. Microscope, all brass, handsomely finished; 12 inches high, with joint for inclination; draw tube; rack-and-pinion, and lever fine adjustments; glass stage, with rotating diaphragm; concave mirror on bar for direct or oblique light; tripod foot and upright pillar; the whole made in imitation of Zentmayer's Army Hospital Microscope, but smaller; with one eye-piece, No. 1. New,

5036. Microscope, all brass except the iron tripod foot; 11 inches high, with joint for inclination; rack adjustment for focus; mechanical stage with rectangular motions; concave mirror; with

1 Eye-piece.

1 dividing Achromatic object-glass, giving from 125 to 225 diameters. Knife, Needle, Pliers, etc. 28 00

20 00

8 50

In mahogany case, with lock and key, 5038. Queen's Universal Household Microscope, (same as No. 3064 of our

Optical Catalogue,) with rack-and-pinion adjustment for focus; draw-tube; achromatic object-glass, giving from 40 to 290 diameters; pliers, objects, etc., in mahogany case. Regular price \$11; will be sold for

5039. Queen's School Microscope. This instrument consists of a tubular stem about 5 inches high, the lower end of which screws firmly into the lid of the box wherein the instrument is packed when not in use. To the upper end of this stem the stage is firmly fixed, while the lower end carries a mirror. Within the tubular stem is a pillar having a rack cut into it, against which a pinion works which is turned by a milled head, and the upper part of this pillar carries a horizontal arm which bears the leases, so that by turning the milled

No.

PRICE.

head the arm may be raised or lowered, and the requisite focal adjustment obtained. Three magnifiers are supplied, and by using them either separately or in combination, a considerable range of powers, from about 5 to 40 diameters, is obtained. A body tube with eye-piece is also furnished, so that it may be used as a Compound Microscope, by which a power of 65 diameters may be obtained. This instrument may be easily adapted to the purposes of dissection, by placing it between arm-rests or blocks of wood, or books piled one on another, so as to give a support for the hand on each side, at or near the level of the stage.

With 3 magnifiers (or objectives), compound body and 1 eye-piece, as

above described.

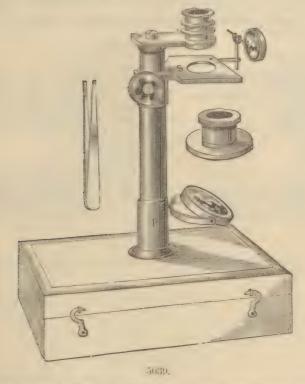
Condensing Lens for opaque objects.

Animalculæ Cage.

Brass Pliers, etc.

New. Regular price \$9; will be sold for





5047. Microscope, 7 inches high, with joint to incline; adjustment for focus by sliding tube; bronzed foot and arm; body of brass, with dividing triplet objective (non-achromatic), giving from 20 to 75 diameters; with pliers, glass slips, etc., in polished walnut case. New. Regular price \$6; will be sold for

4 50

12		0000	
No.			PRICE.
		with rack-and-pinion adjustment	
		O diameters. New,	\$6 00
		with two objectives, giving 25 and	
		ice \$5; will be sold for	3 50
		sisting of a tube 31 inches long and	
½ inch in dia	meter, with an adjust	able tube having a thin glass fitted	
into it, on w	hich the object may	be placed; a cap with diaphragm	
		e-piece and 1 achromatic object-	
		00 diameters. Regular price \$10;	0 50
will be sold to	or	licroscope, simple. New. Regular	6 50
2000, Fleid's Mount	ing and Dissecting A	ricroscope, simple. New. Regular	16 00
This Microscopy	has real adjustment	for focusing, and is fitted in a	
		ed that on opening the case the ins	
		e appliances, though numerous, exp	
view and readily acc		te apprimeres, though manierous, exp	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		n be used either separately or co	mbined.
giving powers from			
		paratus and materials required in m	ounting
objects, as follows:	1	L	
Turn-table,		Labels,	
Hot plate with lamp	,	2 doz. glass slips,	
Dissecting trough,		3 watch glasses,	
3 dipping tubes, asso		1 bottle asphalte,	
3 dissecting needles,		1 bottle gold size,	
3 camel-hair brushes	s, assorted sizes,	1 bottle turpentine,	
2 pair of forceps,		1 bottle Canada balsam,	
Dissecting knife,		1 bottle camphor water and gly	cerine,
Scraper for cleaning	sides,	1 bottle Goadby's fluid,	
Stage forceps,		1 bottle alcohol,	
4 spring clips,		1 bottle chloroform,	
Cover glasses, Tin cells,		1 bottle liquor potassæ, 1 bottle distilled water,	
Tin cens,		i bottle distilled water,	

The bottle all have brushes fixed in the cork. The dissecting trough, watchglasses and hot plate all fit in the recess of the stage, which is at a suitable height for the use of the lamp beneath it.

### ACHROMATIC OBJECT-GLASSES.

The objectives in the following list, although much below the regular price, are in perfect order, and except when stated otherwise, entirely new. They are all in neat brass boxes.

Zentmayer's Objectives.									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	\$10 00 10 00 10 00 15 00 9 00								
Tolles' Objectives.									
2-inch, ang. ap. 13° (second-hand)	6 00 20 00 25 00 35 00 30 00 35 00								
Spencer's Objectives.									
"Professional Series."									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11 00 14 00 18 00 30 00 30 00								
Wales' Objectives.									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	30 00 35 00								
Gundlach's Objectives.									
$\frac{3}{4}$ -inch, angular aperture 32 degrees,	8 00 15 00 25 00								
Zeiss' Objectives.									
i-inch, angular aperture 90 degrees,	19 00 45 00								
Nachet's Objectives.									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	15 00 17 00 18 00								

# Beck's Objectives.

"Popular" Series,	
These have no Boxes, but are furnished with engraved caps, to ex-	PRICE.
2-inch, angular aperture 10 degrees, (Regular price 1 do. do. do. $22$ do (do. $\frac{1}{2}$ do. do. do. $40$ do (do.	15.00) 7 00
½ do. do. do. 40 do ( do.	17.50) 9 00
"Economic" Series.	
Without Boxes.	
1-inch, angular aperture 16 degrees, (Regular price	\$7.00) 5 00
½ do. do. do. 36 do do.	9.00) 6 50
1½-inch, "National" Series,	5 00
1½-inch, "National" Series,	\$25.00) 15 00
To do. do. do. do. 90°. (Second-hand). ( do.	55.00) 30 00
Hartnach's	7 50
Bausch & Lamb's do. do. 72°, (especially good for the Bine	ocular), 22 00
J. B. Dancer's Objectives.	
2 and 4-inch, angular aperture 16 degrees,	8 00
2-inch, do. 14 do	5 00 8 00
2 and 4-inch, angular aperture 16 degrees,	10 00
Field's Educational Series of Objectives.	
3-inch, (second-hand,)	
1 do. do	3 00
1 do. do. do. do. do.	
100 Li Dicker prior prior 2 July Li Col.	
MISCELLANEOUS ARTICLES.	
No. 6008. Goniometer Stage Forceps, for measuring angles of crystals,	PRICE. 2 50
6010. Powell and Lealand's Cobweb Micrometer Eye-piece, measur	
one five-thousandth of an inch $(\frac{1}{5000})$ . New. Regular pri	ice \$45;
will be sold for	, 30 00 fronts
Regular price \$45; will be sold for 6014. Nachet's Section Instrument, nickel plated,	35 00
6014. Nachet's Section Instrument, nickel plated,	3 00
6016 Beck's do. do. in mahogany case, with chisel. Regular price \$9.50; will be sold for	7 50
Regular price \$9.50; will be sold for 6018. Smith's Mounting Instrument, for applying pressure to	a slide
until hardened. New, 6020. Glass Syringe, for taking objects out of water. New, 6022. Turn-table, made by Zentmayer, regular price \$4.50; will be	2 75
and a many in the second secon	DONG YOU - OF
6024. Mahogany Cabinet, containing the following mounting materi	als:
Writing Diamond, 2 dozen Glass Cells, Turn-table, 150 Labels,	
Brass Table and Lamp. Asphalte in Capped Bo	ottle,
Page's Forceps, Gold Size do.	
1 oz thin Glass, • Marine Glue do.	
Page's Forceps, Case for dissecting Instruments, 1 oz thin Glass, 6 dozen Slips, 3 by 1, Glass, 3 do. do. Wood, 1 Gold Size Glycerine do. Marine Glue Canada Balsam do. 1 bottle Deane's Gelati	
New. Regular price \$40; will be sold for	ne. 30 00
Property Property Property and South State	

No.	PRI	CE.
6026. Mahogany Cabinet, containing the following mounting materials:		
Writing Diamond, 100 Labels,		
Tunn table Application		
Brass Table and Lamp, 1 do. Gold Size, Page's Forceps, 1 do. Glycerine,		
Page's Forceps, 1 do. Glycerine,		
oz. Thin Glass, 1 do. Marine Glue,		
3 dozen Slips, 3 by 1, 1 do. Canada Balsam,		
1 do. Cells, 1 do. Deane's Gelatine.		
New. Regular price \$25; will be sold for	\$18	00
6028. Quarto Book Cabinet, for 144 objects, fitted with elastic bands, to keep		
the objects in position. New. Regular price \$10; will be sold for	7	00
6030. Quarto Book Cabinet, for 180 objects, with 30 trays, fitted with elastic		
bands, to keep the objects in position. New,	7	50
6032. Duodecimo Book Cabinet, for 18 objects. New. Regular price, \$1.50;		
will be sold for		40
6034. Set of 12 Trays with cover, to hold 72 objects lying flat,	1	00
6036. Nobert's 19-Band Test Plate; somewhat defective, but shows all the		
bands. Regular price \$50; will be sold for	20	
6038. Nobert's 19-Band Test Plate; end of slip is broken off,	15	
6040. Peticolas' Test Plate of 16 diatoms in Balsam, with catalogue,	3	00
6042. Microscope Lamp, on brass stand with upright pillar; clamp for setting		
at any height; powerful bull's-eye lens 21 inches diameter; revolving		
diaphragm and blue-glass. Regular price \$10; will be sold for .	3	50

## TELESCOPES.

PRICE. No.

6101. Astronomical Telescope; body and movements all brass, with rack adjustment for focus; 23-inch achromatic object-glass; pancratic terrestrial eye-piece, magnifying from 20 to 40 diameters; 3 celestial eye-pieces, with sun-glasses, magnifying respectively, 20, 60 and 100; first surface diagonal reflector for observing the sun; finder and dew shade. Mounted on brass tripod stand with strong steadying rods, and having vertical motion by rack-and-pinion, and horizontal motion by endless screw. In strong mahogany case. Regular price \$225; will be sold for 



6103. Astronomical Telescope; body and movements all brass, with rack adjustment for focus; 23-inch achromatic object-glass; 1 terrestrial

40 00

and I celestial eye-piece, with sun-glass; pillar and claw tripod stand; in wooden case. Nearly new. Regular price \$65; will be sold for 6105. Astronomical Telescope; body and movements all brass, with rack adjustment for focus; 1%-inch achromatic object-glass; 1 terrestrial 

20 00